



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,250	01/31/2002	Oscar A. Zuniga	100111772-1	2277

7590 10/18/2005
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

ALAVI, AMIR

ART UNIT	PAPER NUMBER
----------	--------------

2621

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/062,250

Applicant(s)

ZUNIGA, OSCAR A.

Examiner

Amir Alavi

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Response to Arguments

- Applicant's arguments filed September, 15, 2005 have been fully considered but they are not persuasive.
- Applicant argues in essence that the cited prior art, namely, Gahang-USPN-5,838,463 does not select one threshold among a plurality of thresholds, based on the relative magnitudes of the thresholds.
- Examiner disagrees and indicates that the cited prior art reasonably address limitations of the claimed invention. Applicant is reminded that Examiner will interpret each claim in the broadest reasonable sense, as such, the claims and only the claims form the metes and bounds of the invention. In this regard, Examiner considers Gahang to reasonably address the aforementioned limitations of selecting one threshold among a plurality of thresholds, based on the relative magnitudes of the thresholds (please note, figures 8A and 8B, in correlation to column 16, lines 58-67 and column 17, lines 1-30. As indicated with the threshold data value DT represented by threshold indexes t0-t3, t4-t7, t8-t11 and t12-t15, and for selectively generating one of the received threshold indexes in response to a first selection signal. It is clear that one threshold has been selected among plurality of thresholds, in this regard, the above delta threshold values are of relative magnitudes to each other).

Claim Rejections - 35 USC § 102

- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- Claims 1-4 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Gahang (USPN 5,767,978).

Regarding claim 1, Gahang discloses: selecting, for each pixel to be thresholded in the image, one threshold among a plurality of thresholds, based on the relative magnitudes of the thresholds (please note, figures 8A and 8B, in correlation to column 16, lines 58-67 and column 17, lines 1-30. As indicated with the threshold data value DT represented by threshold indexes t0-t3, t4-t7, t8-t11 and t12-t15, and for selectively generating one of the received threshold indexes in response to a first selection signal. It is clear that one threshold has been selected among plurality of

thresholds, in this regard, the above delta threshold values are of relative magnitudes to each other); and assigning each pixel to one of two classes according to the value of its intensity relative to the selected threshold for the pixel (please note, figures 2, 8A, and 8B, in correlation to column 6, lines 8-32. As indicated a binary image determining unit 36 compares the threshold value THR outputted from the threshold generator 35 with a data value EP outputted from the edge emphasis post-processing unit 28 in order to determine the image data of a document as the binary data corresponding to the black and white values of each pixel. In this regard, black and white vales of pixels having relative intensity values).

Regarding claim 2, Gahang discloses, selecting among at least one threshold that is dynamic, and a threshold that is constant (please note, figure 2, in correlation to column 18, lines 29-31. As indicated the threshold data THR outputted from the threshold generator 35 is pixel brightness data of 6 bits with the automatic gain control or with a constant value).

Regarding claim 3, Gahang discloses, selecting a threshold corresponding to the highest intensity value among the plurality of thresholds (please note, figures 2, 8A, and 8B, in correlation to column 6, lines 8-32. As indicated a binary image determining unit 36 compares the threshold value THR outputted from the threshold generator 35 with a data value EP outputted from the edge emphasis post-processing unit 28 in order to determine the image data of a document as the binary data corresponding to the black and white values of each pixel. In this regard, black and

white vales of pixels having relative intensity values, herein, color white having the highest intensity value).

Regarding claim 4, Gahang discloses, selecting the threshold having the largest magnitude among the plurality of thresholds (please note, figure 8B, in correlation to column 17, lines 1-30. As indicated a given threshold value t_i has a pixel brightness data value of 0 to 63, wherein I is an integer and has a value of 0 to 15. In this, 15 is the largest magnitude among the plurality of thresholds).

Regarding claim 10, arguments analogous to those presented for claim one are applicable, with the addition of a processor. In this regard, please note, figure 1, in correlation to column 16, lines 58-67.

Regarding claim 11, arguments analogous to those presented for claim one are applicable.

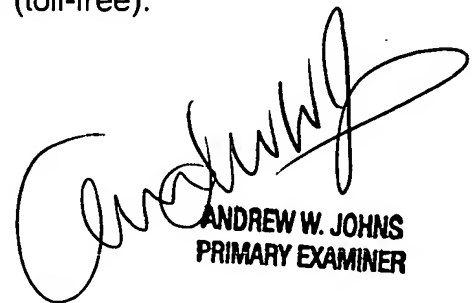
Conclusion

- **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact Information

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amir Alavi whose telephone number is 571-272-7386.
- The examiner can normally be reached on Mon-Thu.. 8:00 am thru 6:30pm.If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joseph Mancuso can be reached on 571-272-7695.
- The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.
- For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AA
Group Art Unit 2621
14 October 2005



ANDREW W. JOHNS
PRIMARY EXAMINER